

[0082] The control circuitry **902** may comprise a TCP stream control circuitry **910** for creating, deleting, re-configuring the TCP streams according to any of the embodiments. A monitoring circuitry **912** may be for monitoring at least one predetermined parameter representing communication performance on a given path or paths **112-116**. The monitoring circuitry **912** may also be responsible of estimating the future performance of the communication and, thus, how the at least one performance parameter is expected to change. A TCP stream selection circuitry **914** may be for selecting the at least one TCP stream for the communication.

[0083] As used in this application, the term ‘circuitry’ refers to all of the following: (a) hardware-only circuit implementations, such as implementations in only analog and/or digital circuitry, and (b) combinations of circuits and software (and/or firmware), such as (as applicable): (i) a combination of processor(s) or (ii) portions of processor(s)/software including digital signal processor(s), software, and memory(ies) that work together to cause an apparatus to perform various functions, and (c) circuits, such as a microprocessor(s) or a portion of a microprocessor(s), that require software or firmware for operation, even if the software or firmware is not physically present. This definition of ‘circuitry’ applies to all uses of this term in this application. As a further example, as used in this application, the term ‘circuitry’ would also cover an implementation of merely a processor (or multiple processors) or a portion of a processor and its (or their) accompanying software and/or firmware. The term ‘circuitry’ would also cover, for example and if applicable to the particular element, a baseband integrated circuit or applications processor integrated circuit for a mobile phone or a similar integrated circuit in a server, a cellular network device, or another network device.

[0084] The techniques and methods described herein may be implemented by various means. For example, these techniques may be implemented in hardware (one or more devices), firmware (one or more devices), software (one or more modules), or combinations thereof. For a hardware implementation, the apparatus(es) of embodiments may be implemented within one or more application-specific integrated circuits (ASICs), digital signal processors (DSPs), digital signal processing devices (DSPDs), programmable logic devices (PLDs), field programmable gate arrays (FPGAs), processors, controllers, micro-controllers, microprocessors, other electronic units designed to perform the functions described herein, or a combination thereof. For firmware or software, the implementation can be carried out through modules of at least one chip set (e.g. procedures, functions, and so on) that perform the functions described herein. The software codes may be stored in a memory unit and executed by processors. The memory unit may be implemented within the processor or externally to the processor. In the latter case, it can be communicatively coupled to the processor via various means, as is known in the art. Additionally, the components of the systems described herein may be rearranged and/or complemented by additional components in order to facilitate the achievements of the various aspects, etc., described with regard thereto, and they are not limited to the precise configurations set forth in the given figures, as will be appreciated by one skilled in the art.

[0085] Embodiments as described may also be carried out in the form of a computer process defined by a computer program. The computer program may be in source code form, object code form, or in some intermediate form, and it may be

stored in some sort of carrier, which may be any entity or device capable of carrying the program. For example, the computer program may be stored on a computer program distribution medium readable by a computer or a processor. The computer program medium may be, for example but not limited to, a record medium, computer memory, read-only memory, electrical carrier signal, telecommunications signal, and software distribution package, for example. Coding of software for carrying out the embodiments as shown and described is well within the scope of a person of ordinary skill in the art.

[0086] Even though the invention has been described above with reference to an example according to the accompanying drawings, it is clear that the invention is not restricted thereto but can be modified in several ways within the scope of the appended claims. Therefore, all words and expressions should be interpreted broadly and they are intended to illustrate, not to restrict, the embodiment. It will be obvious to a person skilled in the art that, as technology advances, the inventive concept can be implemented in various ways. Further, it is clear to a person skilled in the art that the described embodiments may, but are not required to, be combined with other embodiments in various ways.

1. A method, comprising:

configuring, by a wireless node, a plurality of transport layer protocol streams for a communication with another node via at least one communication path, wherein each transport layer protocol stream has a different maximum segment size;

monitoring at least one performance parameter of each communication path between the wireless node and the other node; and

selecting at least one transport layer protocol stream for the communication on the basis of the monitoring.

2. The method of claim 1, further comprising:

detecting a predetermined change in the monitored at least one performance parameter on a given communication path;

configuring a new transport layer protocol stream with a new maximum segment size at least partly on the basis of the detection while communicating with the other node; and

selecting the new transport layer protocol stream for the communication path.

3. The method claim 1, wherein the monitored performance parameter comprises at least one of a transmission error rate, a physical layer transmission rate, traffic load.

4. The method of claim 1, further comprising:

upon detecting or estimating at least one of the following with respect to a given communication path: increase in the transmission rate, decrease in the traffic load, decrease in the transmission error rate, and decrease in the number of retransmissions, selecting a transport layer protocol stream having a larger maximum segment size for the communication path; and

upon detecting or estimating at least one of the following with respect to a given communication path: decrease in the transmission rate, increase in the traffic load, increase in the transmission error rate, and increase in the number of retransmissions, selecting a transport layer protocol stream having a lower maximum segment size for the communication path.